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April 17, 2008
Project No. 8128.01.20

Mr. Dana Bayuk
Oregon Department of Environmental Quality
2020 SW 4th Avenue, Suite 400
Portland, Oregon 97201-4987

Re: Pre-Injection Scope of Work
Siltronic Corporation
7200 NW Front Avenue, Portland, OR
ECSI #183

Dear Dana:

On behalf of Siltronic Corporation (Siltronic), MFA has prepared the following scope of work for pre-injection activities. This scope of work was prepared based on the approach described in the Siltronic's Focused Feasibility Study (the FFS), which was submitted to the Oregon Department of Environmental Quality (DEQ) on October 23, 2007). The Siltronic FFS was prepared and submitted consistent with the requirements of the *Order Requiring Remedial Investigation and Source Control Measures*, DEQ No. VC-NWR-03-16 (the TCE Order). The TCE order required investigation of trichloroethene (TCE) and its degradation products (specifically, cis-1,2-dichloroethene (DCE) and its isomers, and vinyl chloride), and implementation of source control measures if necessary.

The FFS recommended enhanced *in-situ* bioremediation (EIB) for the source area, which includes the former underground storage tank (UST) area and the pilot study area (Figure 1). Access to the source area is limited due to the presence of facility equipment and utilities, both aboveground and subsurface. The FFS recommended additional delineation of TCE in groundwater below the source area, and identified potential areas where facility equipment could be removed to improve access. Siltronic received comments from DEQ regarding the FFS on February, 14, 2008; in their comments, DEQ concurred with the recommended approach for the source area. The source area scope of work was further refined during a scoping meeting with DEQ on April 9, 2008.

During the scoping meeting, MFA identified potential equipment removal options, and potential groundwater delineation boring locations. This letter provides additional detail

for equipment removal, identifies proposed boring locations, and describes the approach for TCE delineation.

AST Removal

The scope of work for this task includes demolition of the aboveground storage tank (AST) farm located adjacent to the former underground storage tank area (see Figure 1). The objective of the removal is to improve access for delineating TCE in groundwater, and potential injection points or monitoring wells. The ASTs replaced the former TCE UST system in approximately 1983. The tanks will be removed using a crane, and the concrete containment structure will be demolished. Surface piping (air, electrical, product) will be disconnected as well. Two air return tanks located adjacent to the AST farm may also be removed, if possible. MFA will collect samples of concrete from below the tanks and from the containment sump to allow for proper disposal of the concrete.¹

Supplemental TCE Delineation

The objective of the supplemental delineation is to further characterize the vertical and lateral distribution of TCE in groundwater below the source area. The scope of work will include collecting reconnaissance groundwater samples and pneumatic slug test data. The equipment and methods for the delineation will be consistent with the approach for the supplemental riverbank delineation (2007) and the previous pilot study area investigation (2006).

Based on DEQ's comments and the scoping meeting, MFA identified ten initial locations for reconnaissance groundwater sampling in or near the source area (see Figure 1). Four samples will be attempted from each boring, at approximate depths of 25, 50, 75, and 100 feet below ground surface. Samples will be analyzed for volatile organic compounds (VOCs) on accelerated turn-around times. Preliminary results will be forwarded to DEQ as they become available to facilitate decisions about revising the approach, if necessary.

The results of the supplemental delineation will be used to identify an approximate area where TCE concentrations in groundwater exceed one percent of the aqueous solubility limit (i.e., approximately 11,000 ug/L). Consistent with the recommendations in the FFS, this area will be the priority for EIB injection.

During the scoping meeting, DEQ acknowledged that the delineation results will not be available for submittal with the work plan. The results will therefore be submitted as an


¹ If TCE is detected in the concrete samples, the concrete will be disposed of in an appropriate Subtitle C facility (e.g., ChemWaste Management – Arlington). If TCE is not detected, the concrete will be recycled.

addendum to the work plan. MFA has contacted subcontractors and developed tentative schedules. We look forward to DEQ's approval of this scope of work.

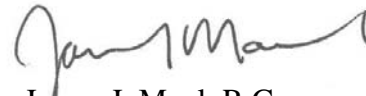
Please call either of us at (971) 544-2139 if you have questions or comments.

Sincerely,

Maul Foster & Alongi, Inc.



James G.D. Peale, R.G.
Senior Hydrogeologist



James J. Maul, R.G.
Principal Hydrogeologist

Attachments: Figure 1 – Proposed Source Area Supplemental Delineation

cc: Tom McCue, Siltronic
Chris Reive, Jordan Schrader Ramis P.C.
Alan Gladstone and William Earle, Davis Rothwell Earle & Xochihua, P.C.
Jim Anderson, DEQ/PHS
Matt McClincy, DEQ/PHS

Figure 1
Proposed Source Area
Supplemental Delineation
 Siltronic Corporation
 Portland, Oregon

Legend

- Geoprobe Location
- Pilot Study Injection Point
- ⊕ Monitoring Well
- Proposed Boring
- ASTs and Containment to be Removed
- Inaccessible Areas
- Pilot Study Area

Note:
 Proposed boring locations are approximate and subject to field modification based on potential buried utilities and/or preliminary results.

Source: Aerial Photograph (2007) obtained from Metro Data Resource Center

